calculating a settlement amount based on the user input information. Certain embodiments of the apparatus include a trigger for computer-assisted transfer of funds based on the settlement amount and an output for outputting at least one of the user input information and the settlement amount.

IN THE CLAIMS

Please amend the claims as follows:

16.   (Amended)   A method for producing convex futures contract documentation using a clearing computer system, said method including:

providing a clearing computer system including a digital electrical computer having a processor electrically connected to an input device for receiving input information and producing input electrical signals representing the input information, the processor further electrically connected to a printing device for printing output electrical signals from the clearing computer system; and

programming the processor to control the clearing computer system in signal processing responsive to the input electrical signals to produce other electrical signals including the output electrical signals, in data processing substeps of:

receiving, as a portion of the input information, a base tick value for a convex futures contract, an expiration time for the convex futures contract, identification of a buyer of the convex futures contract, identification of a seller of the convex futures contract, a trade price for the convex futures contract, and a settlement price for the convex futures contract;

computing a discount factor from the settlement price using the clearing computer system;

determining an actual tick value by applying the discount factor to the base tick value using the clearing computer system;

specifying an amount of money for transfer by a clearing entity between the buyer and the seller for clearing the convex futures contract by applying the actual tick value to a difference between the trade price data and the settlement price;

triggering a transfer of the amount of money using the clearing computer system; and

2

generating, at the printing device, documentation including the amount of money specified by the clearing computer system to be transferred between the buyer and the seller in clearing the convex futures contract.

17.　(Amended)　The method of claim 16, wherein the substep of computing a discount factor includes applying a bootstrap method to the settlement price.

Please add the following new claims:

19.　(New) A futures contract trading and clearing apparatus, said apparatus comprising:

an input device for receiving user input information, the user input information including a base tick value and a trade price;

a database for storing the user input information;

a processor including programmable circuitry for calculating a settlement amount based on the user input information;

a trigger for computer-assisted transfer of funds based on the settlement amount; and

an output for outputting at least one of the user input information and the settlement amount.

20.　(New) The apparatus of claim 19, wherein the processor calculates the settlement amount by

calculating a discount factor;

applying the discount factor to the base tick value to determine an actual tick value; and

calculating the settlement amount based on the actual tick value, the trade price, and user settlement data.